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) Dkt. 68262-A/JPW/PJP

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants

Peter Brink et al.

Serial No.

10/757,827

Filed

January 15, 2004

For

MESENCHYMAL STEM CELLS AS A VEHICLE FOR ION

CHANNEL TRANSFER

1185 Avenue of the Americas New York, New York 10036 November 4, 2005

Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

SIR:

## INFORMATION DISCLOSURE STATEMENT

In order to ensure compliance with applicants' duty of disclosure under 37 C.F.R. \$1.56 and \$1.97(a)-(d), applicants hereby submit this Information Disclosure Statement.

An International Search Report in a corresponding PCT case was issued July 27, 2005.

In compliance with his duty of disclosure under 37 C.F.R. §1.56, applicant directs the Examiner's attention to the following references, which are listed on the accompanying form PTO-1449 (Exhibit A). References 1 to 5 are attached hereto as Exhibits 1 to 5 respectively.

11/08/2005 ZJUHAR1 00000047 10757827

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Applicants Serial No. Filed

Peter Brink et al. :

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January 15, 2004 Page 2

:

1. U.S. 5,591,625 to Gerson et al. Exhibit 1;

- 2. U.S. 6,387,369 B1 to Pittenger et al. Exhibit 2;
- 3. Potapova, I. et al., Human Mesenchymal Stem Cells as a Gene Delivery System to Create Cardiac Pacemakers, Circ Res. April 2004, Vol. 94, No. 7, pages 952-959, Exhibit 3;
- 4. Michael Rosen et al., Genes, stem cells and biological pacemakers, Cardiovasc Res. October 2004, Vol. 64, No.1, pages 12-23, Exhibit 4;
- 5. Qu, J. et al. Expression and function of a biological pacemaker in canine heart. Circulation, March 2003, Vol. 107, No. 8, pages 1106-1109, Exhibit 5;

Applicants maintain that the above-listed reference does not disclose or suggest applicants' claimed invention.

Applicants also submit herewith as Exhibit B a copy of the International Search Report in connection with corresponding PCT application No. PCT/US04/00950, and a copy of the Written Opinion.

If a telephone conference would be of assistance in advancing the prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone at the number provided below.

Applicants submit the fee of \$180 in accordance with 37 C.F.R. § 1.17(p). No other fee is believed to be due in connection with the filing of this Information Disclosure Statement. However, if any other or additional fee is required, authorization is hereby Applicants

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Page 3

given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents

P.O. Box 1450 Alexandria, VA

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PTO/SB/08A (07-05)
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Substitute for form 1449/PTO

Sheet 1

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A THIRD

STATEMENT BY APPLICANT (Use as many sheets as necessary)

Complete if Known			
Application Number	10/757,827		
Filing Date	January 15, 2004		
First Named Inventor	Peter Brink et al.		
Art Unit			
Examiner Name			
Attorney Docket Number	0575-68262-A		

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	<sup>US-</sup> 5,591,625	01-07-97	Gerson et al.	
	2	US- 6,387,369 B1	05-14-02	Pittenger et al.	
		US-			
,		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T <sup>6</sup>

Examiner	 	Date	· ··· ·· <del></del>
Signature		Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (07-05)

Approved for use through 07/31/2006, OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Description of information unless it contains a valid OMB control number. Manager .... Complete if Known **Application Number** 10/757,827 Filing Date INFORMATION DISCLOSURE January 15, 2004 STATEMENT BY APPLICANT First Named Inventor Peter Brink et al. Art Unit (Use as many sheets as necessary) Examiner Name Attorney Docket Number Sheet 2 2 of 0575-68262-A

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	3	POTAPOVA, I. et al., Human Mesenchymal Stem Cells as a Gene Delivery System to Create Cardiac Pacemakers, Circ Res. April 2004, Vol. 94, No. 7 pages 952-959.	
•	4	ROSEN, Michael et al., Genes stem cells and biological pacemakers, Cardiovasc Res. October 2004, Vol. 64, No. 1, pages 12-23.	
	5	QU, J. et al., Expression and function of a biological pacemaker in canine heart. Circulation, March 2003, Vol. 107, No. 8, pages 1106-1109.	

Examiner	,	Date	
Signature		Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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